

EXHIBIT A

1. A CHEMICAL CONVERSION FILM of OUR INVENTION (Izawa et al., US 2004/0154700 A1)

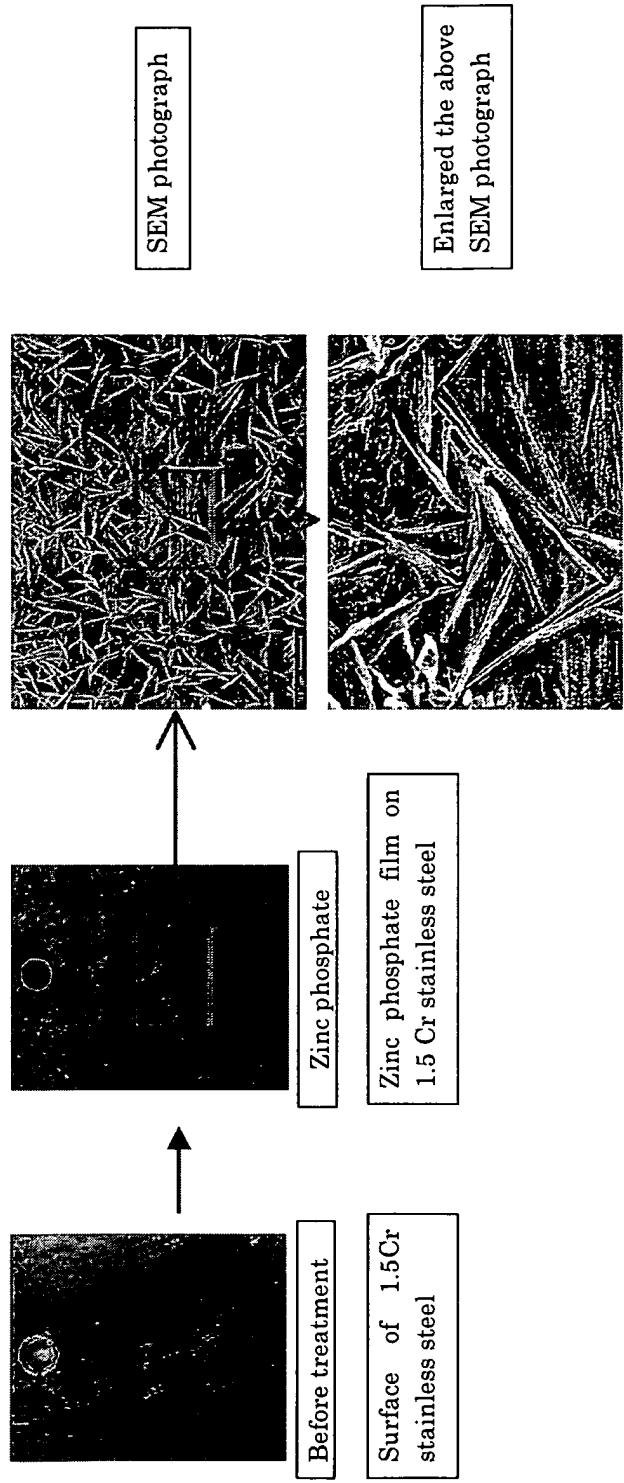


Fig.1 Zinc phosphate film formed on 1.5Cr stainless steel by chemical conversion treatment liquid of Izawa et al.



Immersion (RT(75°C × 10min))
↓
Air blow drying

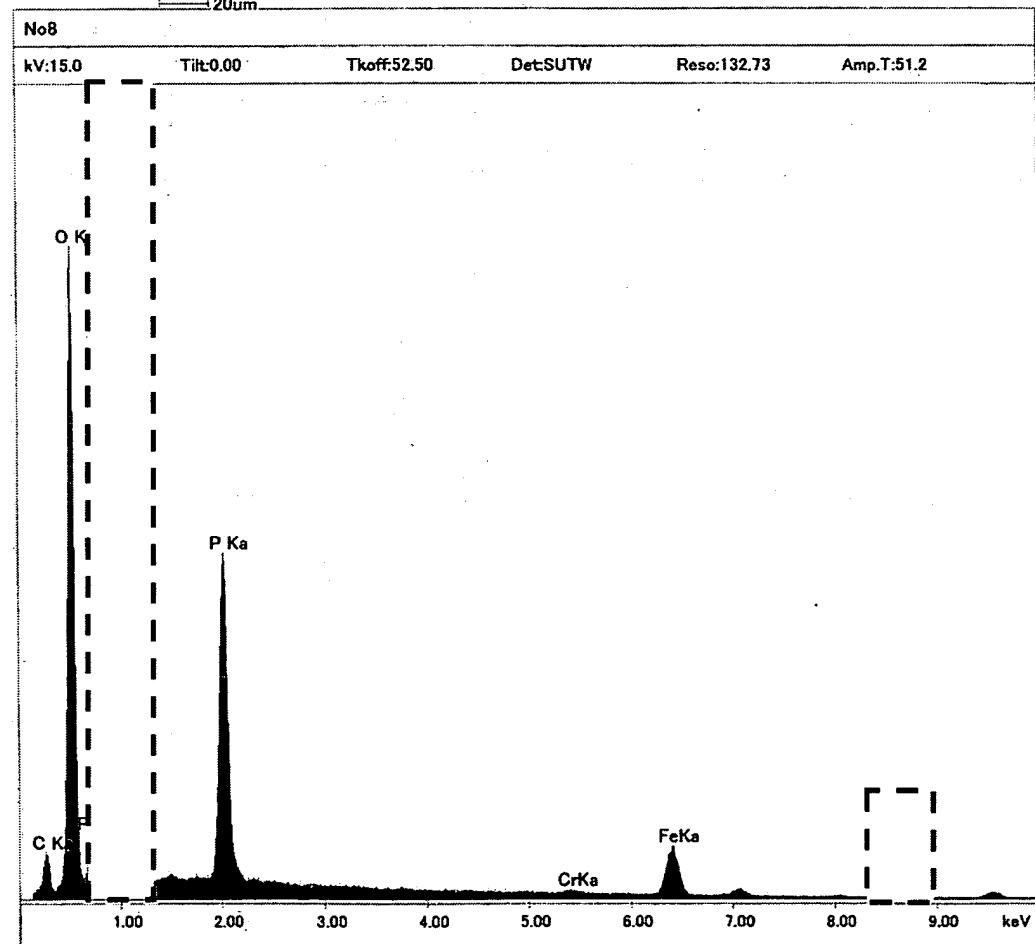


Fig.2 EPMA data of Zinc phosphate film by Izawa

2. FILM of Esler et al. (USP 3,798,074)

We prepared the coating solution by mixing orthophosphoric acid, chromium trioxide, ammonium hydroxide, Zinc oxide, and potassium silicate in water based on the information of lines 6 to 10 of column 6 and the last line "Zinc" of Table III in Esler et al. 13Cr stainless steel plates were dipped into the above coating solutions of Room Temperature and 75 degree Celsius. Chemical adhesion to 13Cr stainless steel is tested by water rinsing and rubbing with cotton sheets. The film of Esler was lost by water rinsing and also by rubbing with cotton sheets. These results show film of Esler is not chemical conversion film of our invention.

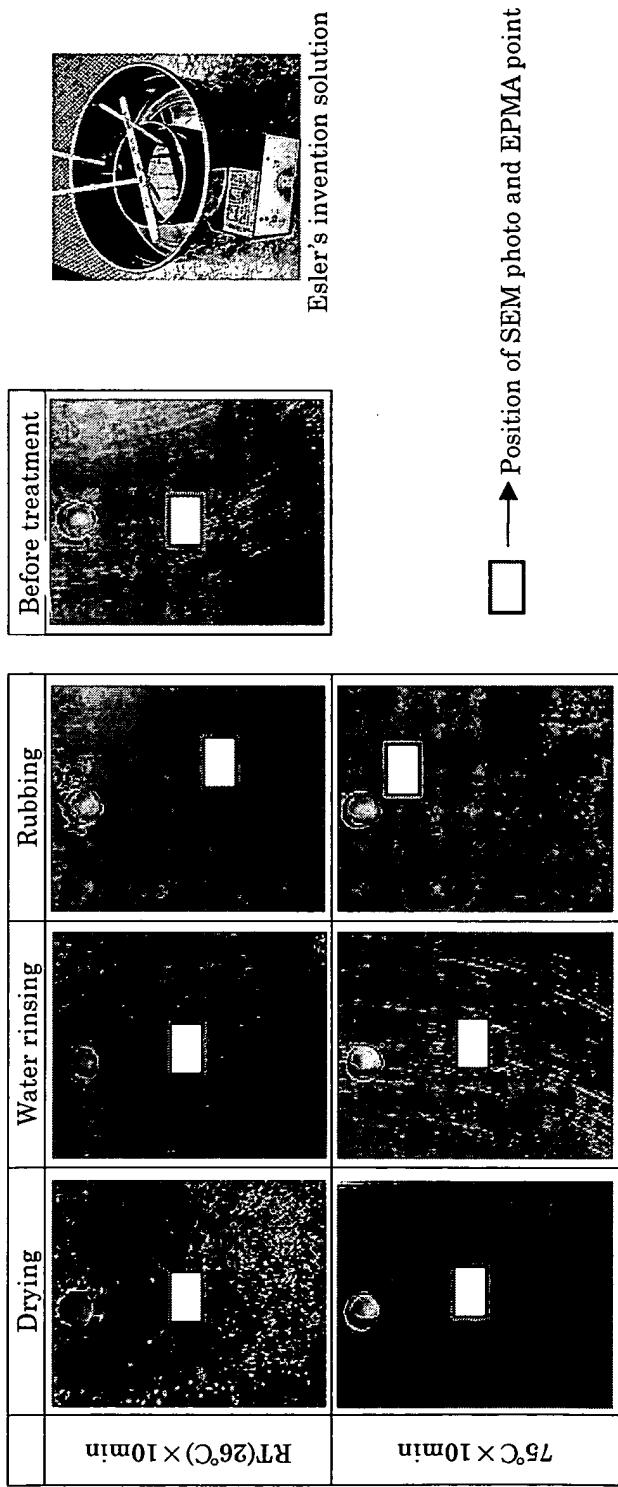


Fig.3 Condition of coating film by Esler's invention solution

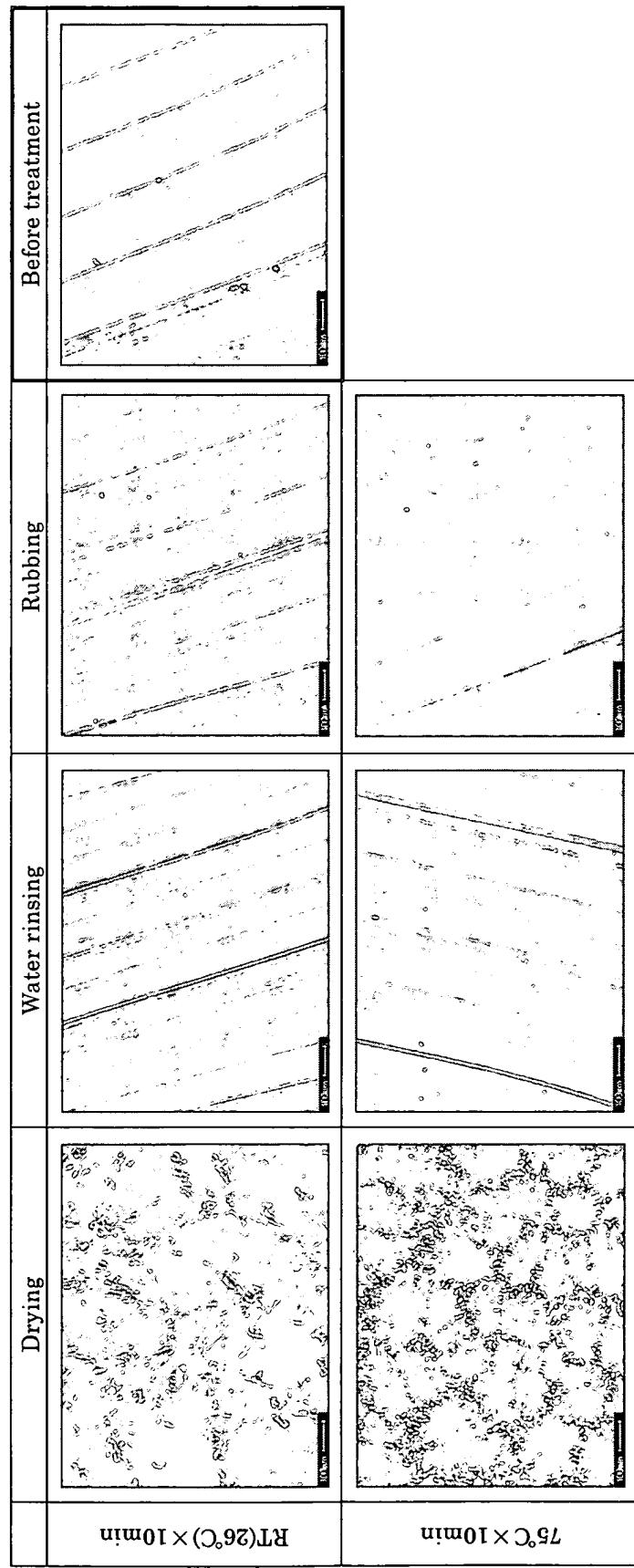


Fig.4 Esler's film by SEM (Scanning Electron Microscopy)

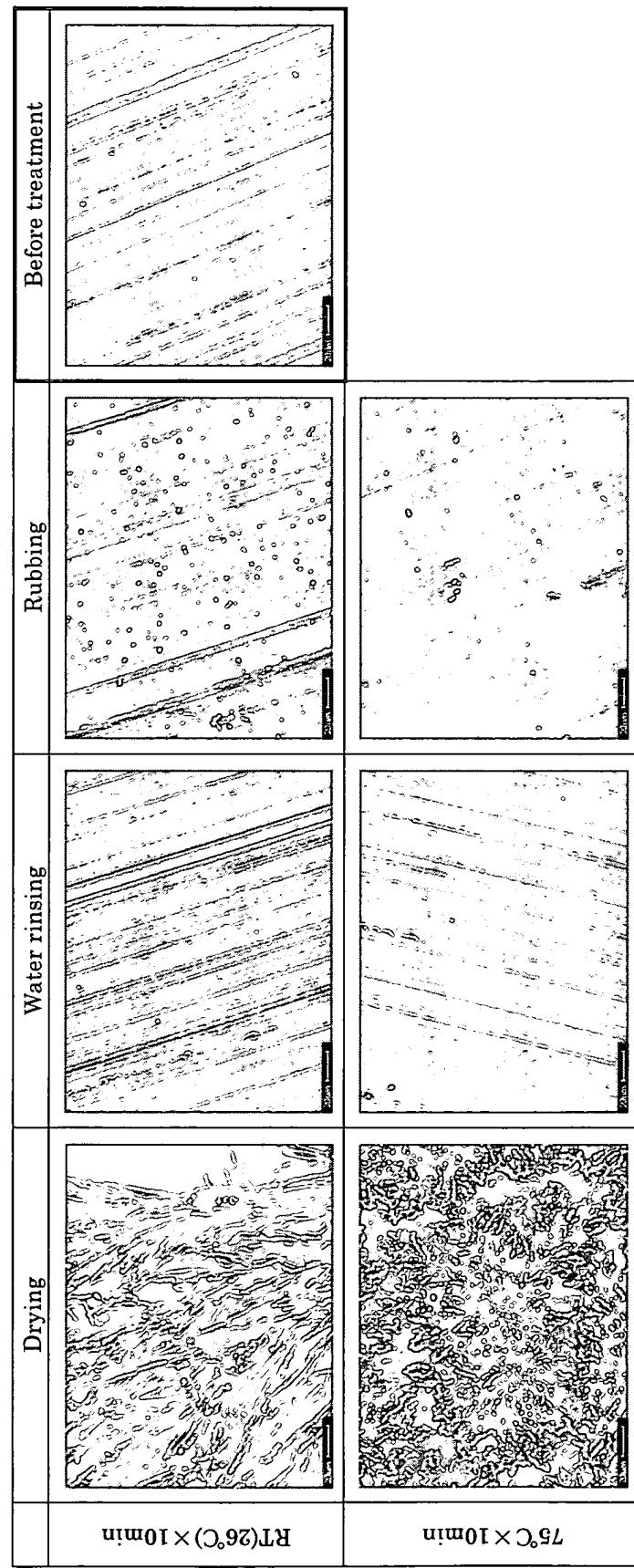


Fig.5 Esler's film by SEM (Scanning Electron Microscopy), enlarged photo of Fig.4

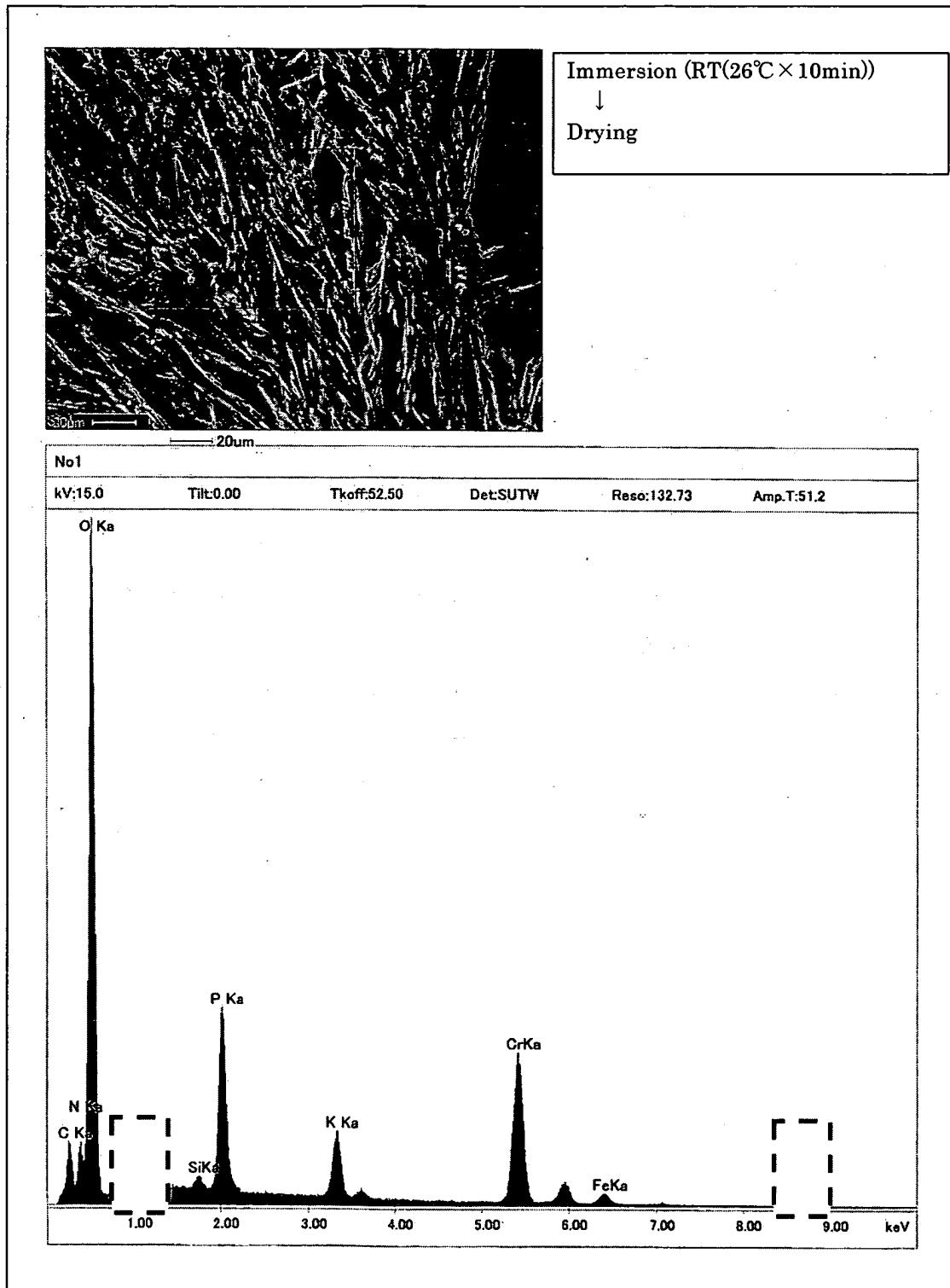


Fig.6-1 Esler's invention film by EPMA

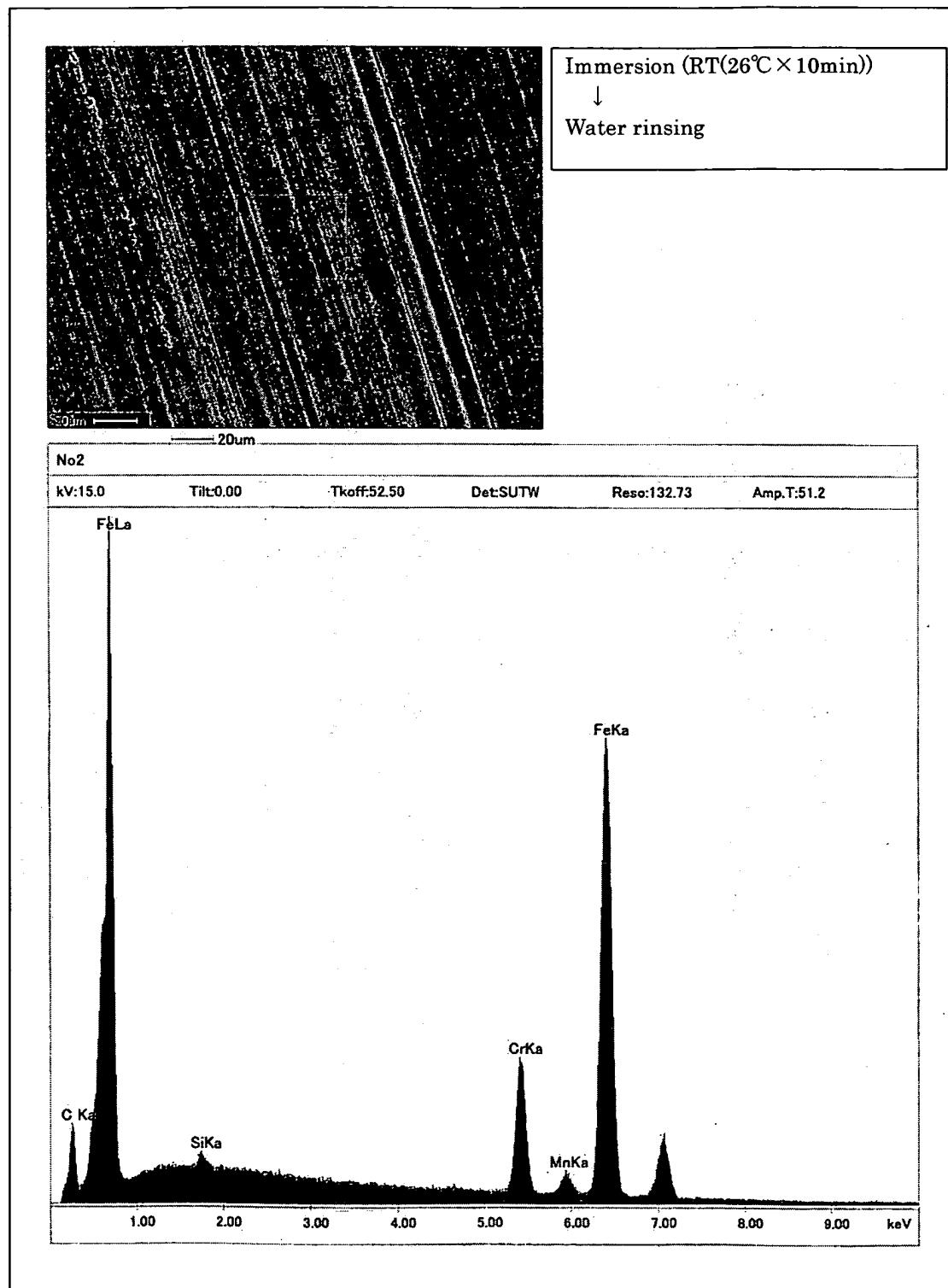


Fig.6-2 Esler's invention film by EPMA

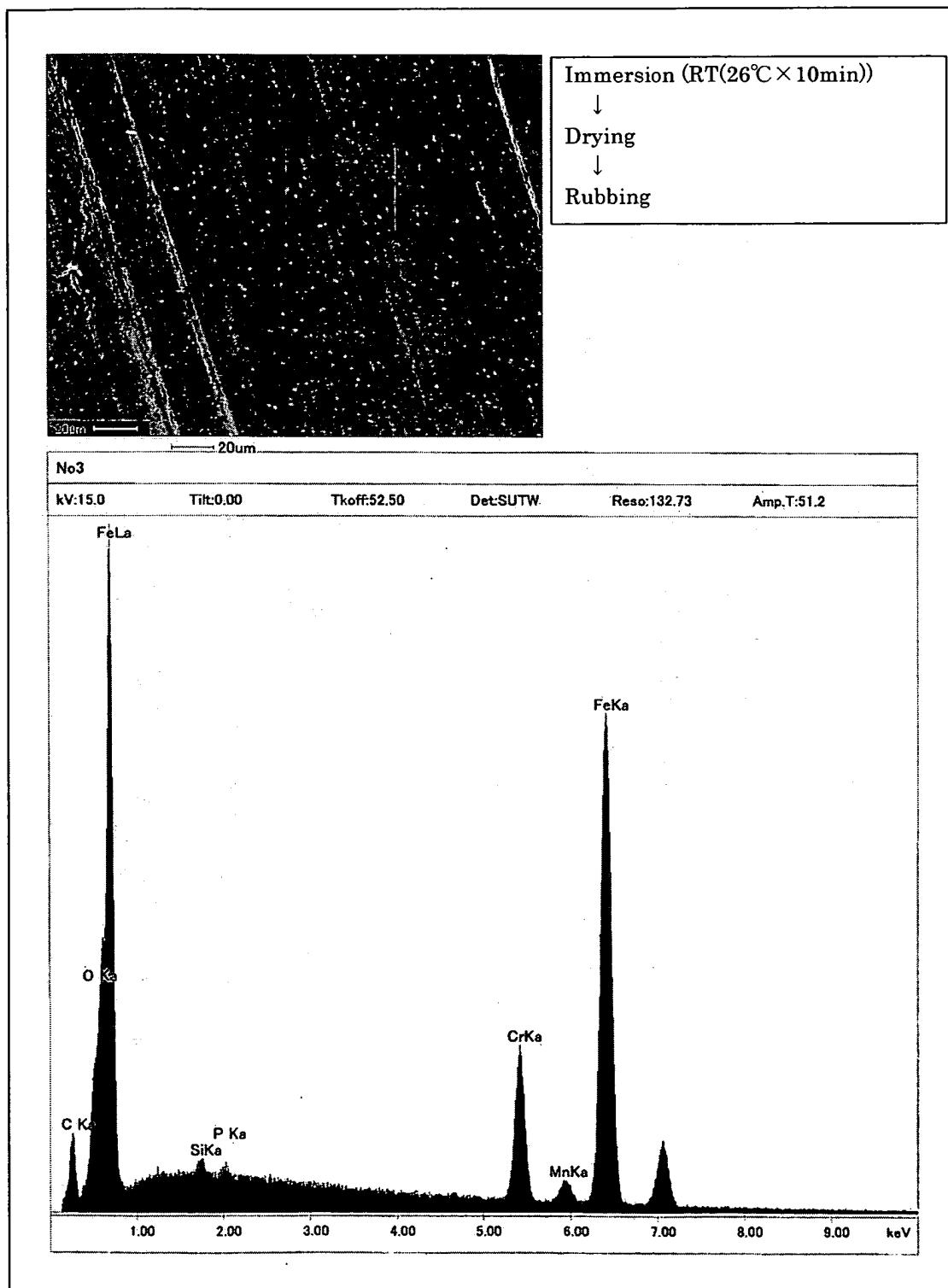


Fig.6 ·3 Esler's invention film by EPMA

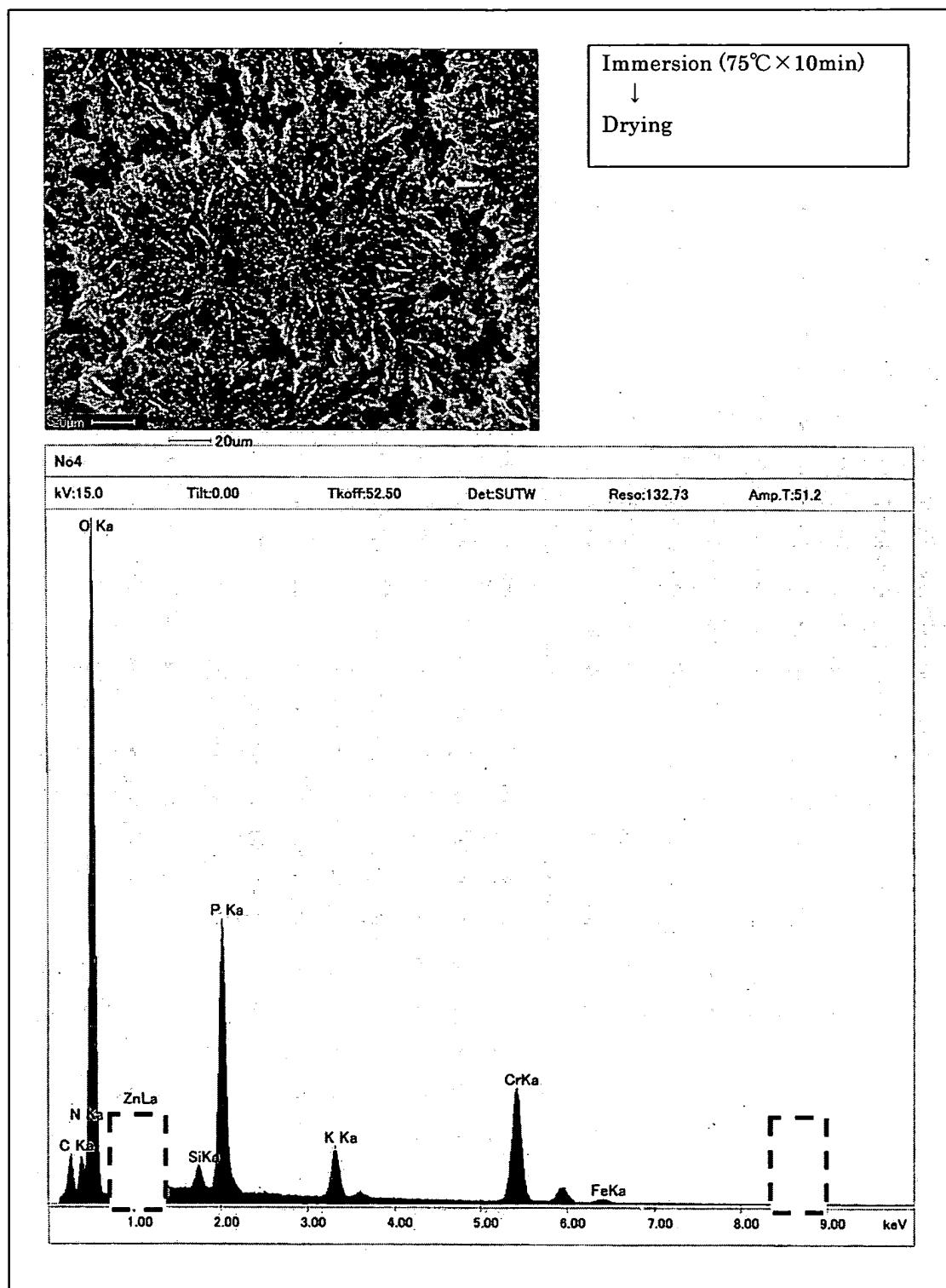
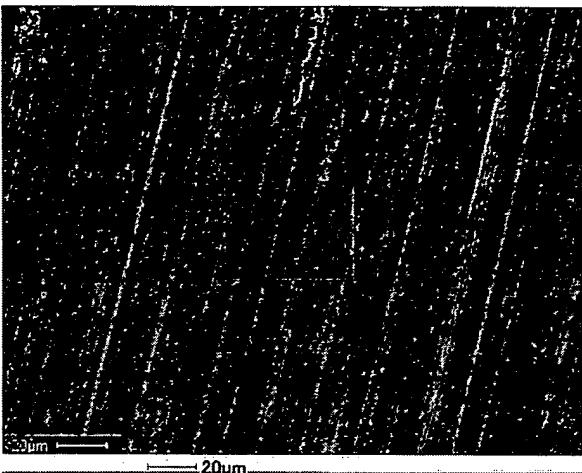


Fig.6-4 Esler's invention film by EPMA



Immersion (75°C × 10min)
↓
Water rinsing

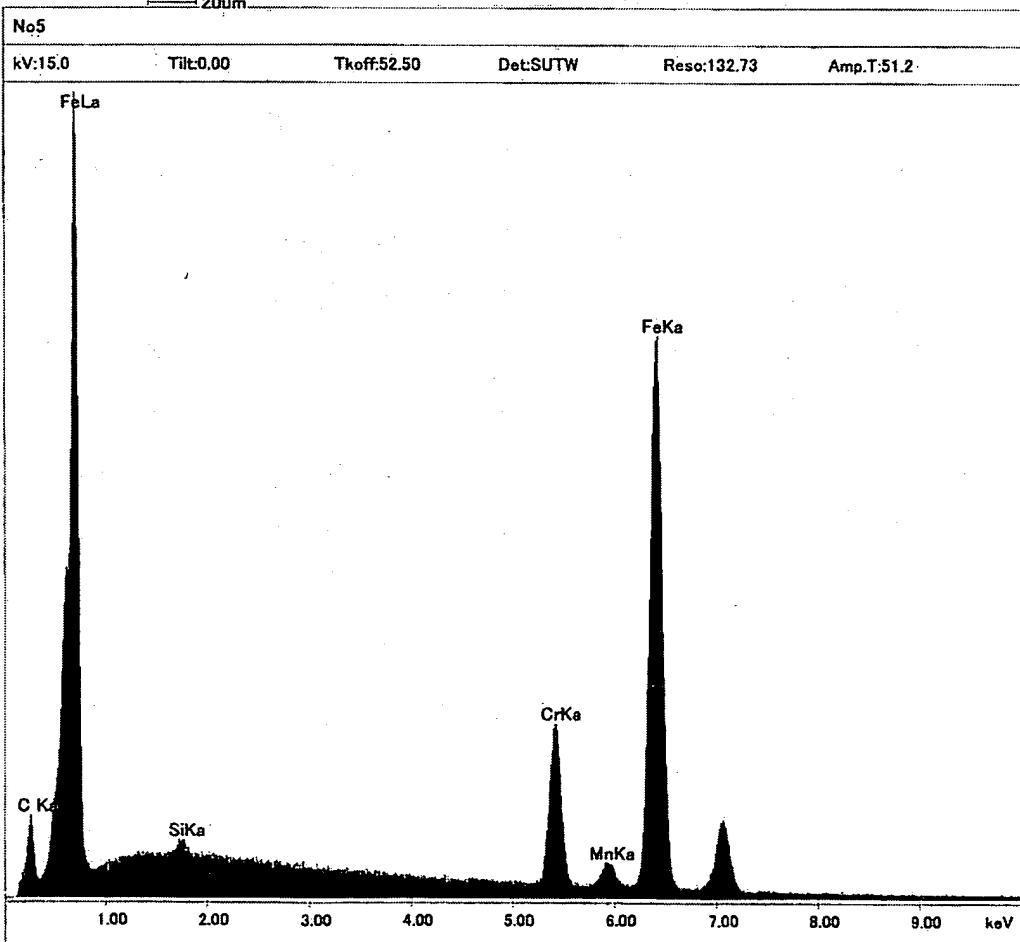


Fig.6-5 Condition of Esler's invention film by EPMA

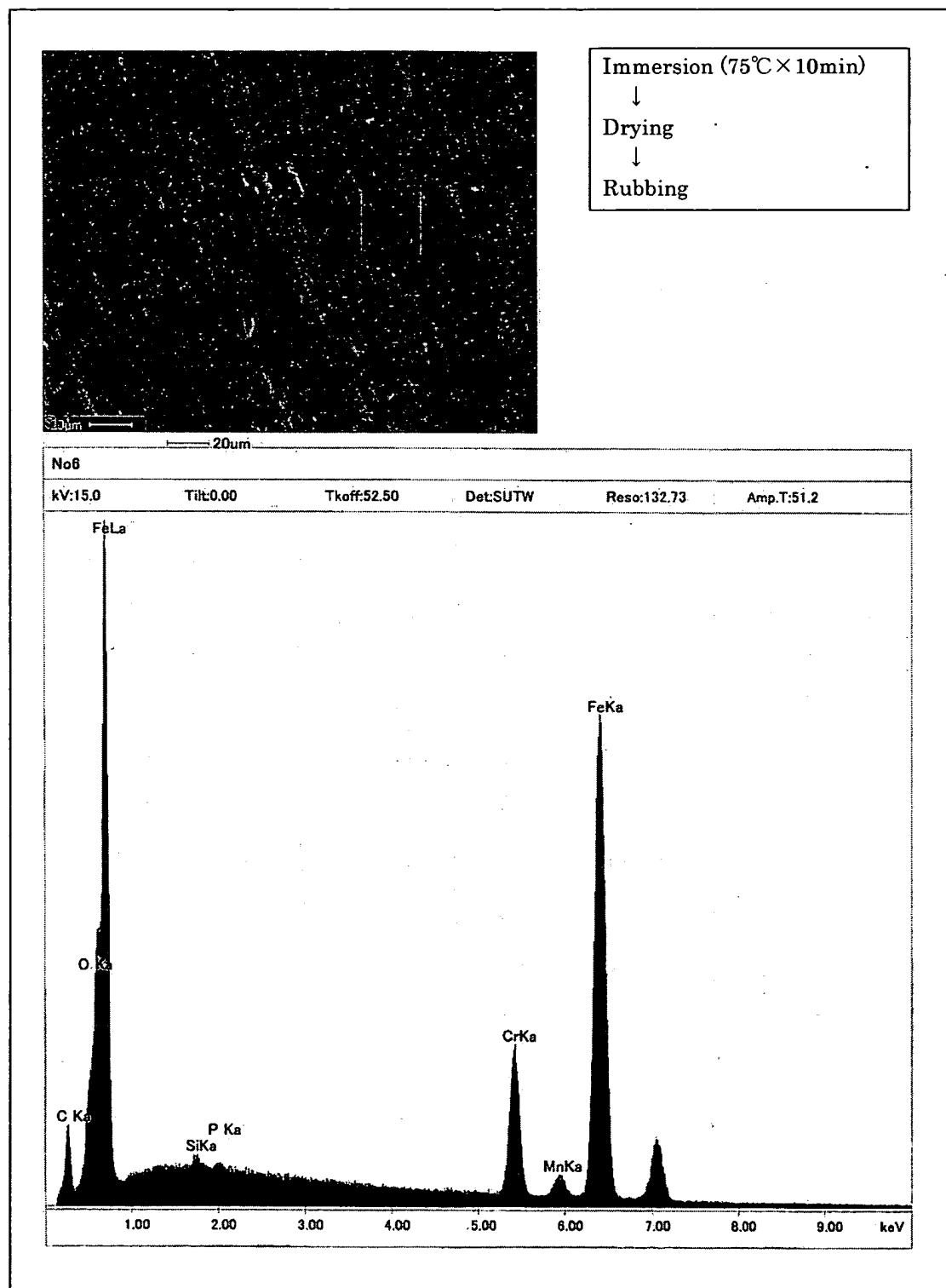


Fig.6-6 Esler's invention film by EPMA

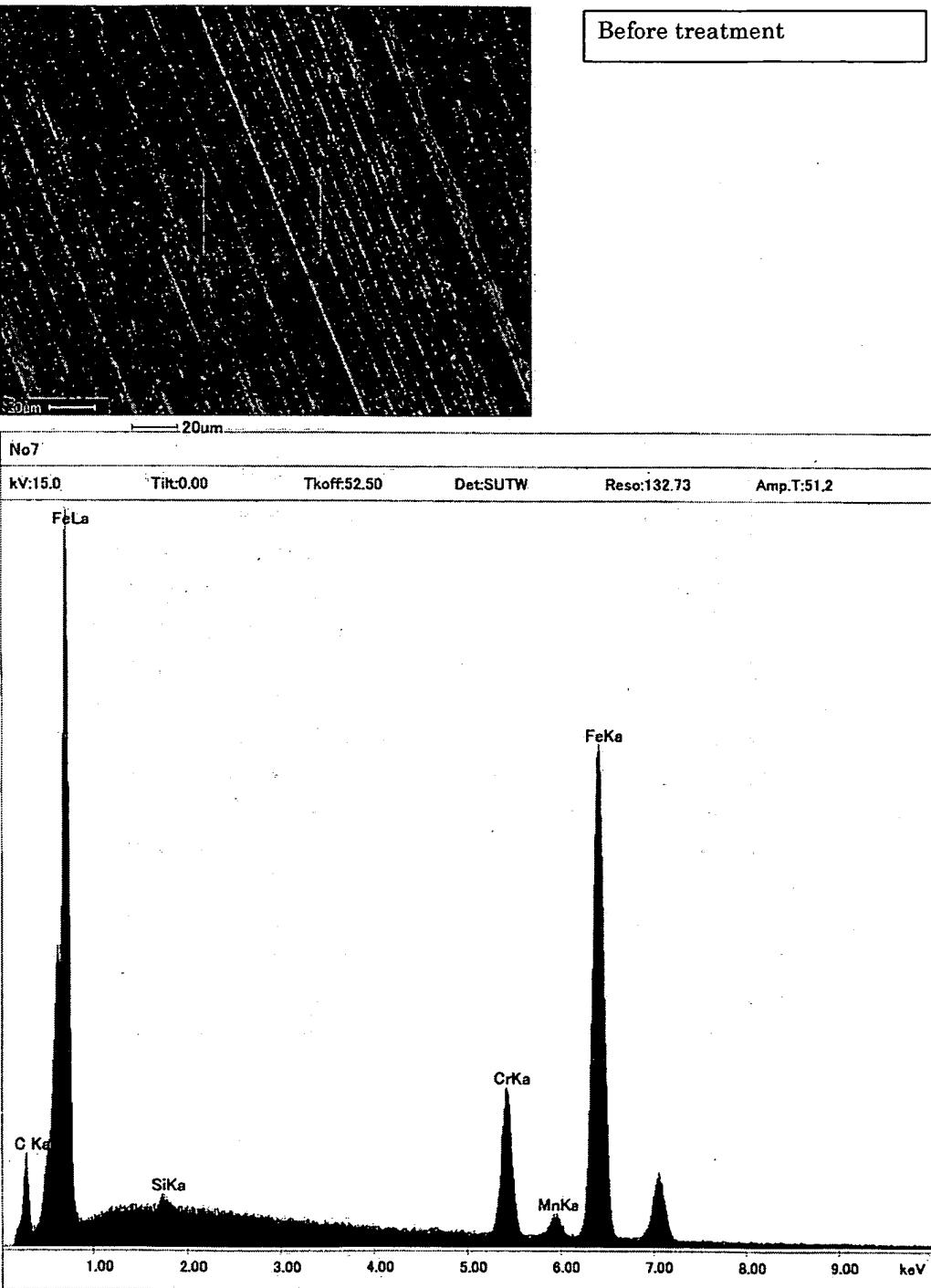


Fig.6-7 13Cr stainless steel (with no film) by EPMA